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10/057,458	01/23/2002	Christopher Pasqualino	13316US02	1287

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EXAMINER	
WONG, WARNER	
ART UNIT	PAPER NUMBER
2616	
MAIL DATE	DELIVERY MODE
07/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/057,458	PASQUALINO, CHRISTOPHER	
	Examiner	Art Unit	
	WARNER WONG	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs (US 5,751,366) in view of Steudel (US 4,156,253).

Regarding claim 6, Hobbs describes a method of communicating video signals over a communications link comprising shortening a blanking period in the data to accommodate auxiliary data (fig. 2-5, col. 3, lines 14-20, shortening the horizontal sync pulse during the horizontal blanking period to accommodate audio (auxiliary data)).

Hobbs describes using AFP method as one approach (col. 1, lines 65-67), suggesting that alternative non-frame-dropping methods possible to be used, but fails to explicitly describe: without dropping any of the video frames.

Steudel also describes a sound (auxiliary) in video transmission comprising: without dropping any of the video frames (col. 2, lines 55-57, the video signal is transmitted in standard time slot without drops).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to use the approach of Steudel to which does not drop video frames when transmitting auxiliary data on video communication in Hobbs.

The motivation for combining the teachings is that it allows domestic receives to receive the video signals of the composite video-sound signal correctly. (Steudel, col. 1, lines 45-47).

Regarding claim 7, Hobbs further describes modifying a HSYNC signal in the data to accommodate the auxiliary data (fig. 2-5, col. 3, lines 14-20, shortening the horizontal sync pulse during the horizontal blanking period to accommodate audio (auxiliary data)).

Regarding claim 8, Hobbs further describes that the auxiliary data may be audio data (fig. 2-5, col. 3, lines 14-20, shortening the horizontal sync pulse during the horizontal blanking period to accommodate audio (auxiliary data)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs in view of Steudel as applied to claim 6, and further in view of Martin (WO 00/14626).

Regarding claim 9, Hobbs and Steudel combined fail to explicitly describe that the communication link is a digital communication link.

Martin describes that the communication link is a digital communication link (p. 8, receiving incoming digital data from a number of peripherals).

It would have been obvious to one with ordinary skill in the art at the time of invention to apply the combined generic video transmission method of Hobbs and Steudel which includes audio signal to the video data transfer between the processor and display of Martin.

The motivation for combining the teachings is that it reduces the need of a separate transmission carrier/signaling for transmitting audio (Hobbs, col. 1, lines 11-14).

Regarding claim 10, Hobbs and Steudel combined describe frames which the auxiliary data is to be transmitted, but fails to explicitly describe modifying a VSYNC signal in all such frames.

Martin describes modifying a VSYNC signal in all frames (p. 10 & fig. 6, during (each) vertical blanking period which is used for synchronizing the (all) next frames (VSYNC signal), inserting STARTBLANK into the period (modifying VSYNC)).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the combined video transmission method of Hobbs and Steudel to alter the transmitted VSYNC signals as in Martin.

The motivation for combining the teachings is that it reduces the need of a separate transmission carrier/signaling for transmitting audio (Hobbs, col. 1, lines 11-14).

Regarding claim 11, Hobbs and Steudel combined fail to explicitly describe inserting a notch in all said VSYNC signals.

Martin describes inserting a notch in all said VSYNC signals (p. 10 & fig. 6, where during (each) vertical blanking period which is used for synchronizing the next frames (VSYNC signal), a start blanking pulse STARTBLANK (notch) is inserted during the period) to mark/indicate additional data is present.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify to insert a notch in the VSYNC signals as in Martin to let the receiving side know that there is additional data present in the transmission.

The motivation for combining the teachings is that it would clearly indicate the time at which additional data present in the transmission.

Regarding claim 12, Hobbs, Steudel and Martin combined describe all limitations set forth in claim 11 for inserting a notch in the VSYNC signals, but fail to explicitly describe that inserting the notch includes inserting an 8 clock cycle pulse into said VSYNC signals.

However, inserting a notch of 8 clock cycle pulse which is considered to be optimal for audio packets of DVI-CE standard present no new or unexpected results with other lengths to for audio/auxiliary packets, so long as the packet is being accordingly transmitted and processed in a successful way. See MPEP 2144.05 and In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235(CCPA 1955).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention by applicant to modify the invention of Martin to insert an 8 clock cycle notch into said VSYNC signals n to obtain the invention as specified in claim 12.

Regarding claim 13, Hobbs, Steudel and Martin combined describe all limitations set forth in claim 11 for inserting a notch in the VSYNC signals, but fail to describe that the notch is inserted into said VSYNC signals 8 clock pulses after a first edge of said VSYNC signals.

However, inserting a notch 8 clock pulses after the first edge of the VSYNC signal present no new or unexpected results with other timeframes to insert the notch (for audio/auxiliary packets), so long as the packet is being accordingly transmitted and processed in a successful way. See MPEP 2144.05 and In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235(CCPA 1955).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention by applicant to modify the invention of Martin to insert a notch 8 clock cycle pulses after the first edge of the VSYNC signal to obtain the invention as specified in claim 12.

3. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs in view of Steudel and Martin as applied to claim 10 above, and further in view of Kim (6,870,930).

Regarding claim 14, Hobbs, Steudel and Martin combined describe all limitations set forth in claim 10.

Hobbs, Steudel and Martin combined lack what Kim describes: adapting control signals (col. 9, lines 12-16) to be compliant with the HDCP (content protection) standard (col. 9, lines 37-64, where the control signals sent during DE low period are corrupted according to the DE corruption protocol which complies with HDCP.)

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to adapt (secure) the video control signals of Hobbs, Steudel and Martin combined to a content protection standard as per Kim.

The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content [control signals] and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 15, Hobbs, Steudel and Martin combined fail to explicitly describe that the control signal is transmitted while in the blank period when the auxiliary data is transmitted.

Kim describes that the control signal is transmitted while in the blank period [when the auxiliary data is transmitted] (col. 9, lines 37-64).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to transmit the control signal while in the blanking period also as in Kim.

The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content [control signals] and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 16, Hobbs, Steudel and Martin combined fail to describe that the control signal is ctl3.

Kim further describes that (one of the) control signals is ctl3 (col. 9, lines 15, control[3]).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to transmit the control signal ctl3 as in Kim while in the blanking period of Hobbs, Steudel and Martin combined.

The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content [control signals] and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 17, Hobbs, Steudel, Martin and Kim combined describe all limitations set forth in claim 14, but fail to explicitly describe that the content protection standard comprises a High bandwidth Digital Content Protection (HDCP) standard.

Kim describes that the content protection standard comprises a High bandwidth Digital Content Protection (HDCP) standard (col. 9, line 64).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to transmit signals in Hobbs, Steudel, Martin and Kim combined using HDCP standard as in Kim. The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 18, Hobbs, Steudel, Martin and Kim combined fail to describe adapting the control signal comprises generating a ctl3 input using at least one VSYNC signal.

Kim describes adapting the control signal comprises generating a ctl3 input using at least one VSYNC signal (col. 9, lines 12-16, where control[3] (ctl3) signal is generated & sent during the low (blanking) periods in tandem with (using) VSYNC signals).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to transmit the control signal ctl3 when the synchronization (VSYNC) signals are also transmitted as in Kim in the blanking period of Hobbs, Steudel, Martin and Kim combined.

The motivation being that "There is [also] a need for secure communication as a result of increase value of the communicated content [ctl3 signals] and the increased likelihood that communicated content will be copied or altered", Kim, col. 1, lines 30-34).

Regarding claim 19, Hobbs, Steudel, Martin and Kim combined describe generating a ctl3 input, but fails to explicitly describe ensuring that the ctl3 input is a positive going pulse.

However, whether if ctl3 is a positive or negative going pulse present no new or unexpected results, so long as the adaptation of the control signal signifies the processing in a successful way. See MPEP 2144.05 and In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235(CCPA 1955).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention by applicant to modify the invention of Hobbs, Steudel, Martin and Kim combined to comprise a positive going pulse for the ctl3 input to obtain the invention as specified in claim 19, so long as the adaptation of the control signal signifies the processing in a successful way

Response to Arguments

4. Applicant's arguments with respect to claims 6-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WARNER WONG whose telephone number is (571)272-8197. The examiner can normally be reached on 6:30AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on 571-272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner
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/W. W./
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